

REMARKS

This preliminary amendment is a revision of a **non-entered** amendment after allowance under 37 CFR 1.312 (Rule 312) that was submitted on February 12, 2004, in parent application **S.N. 09/926,310** in order to address certain problems brought to applicant's attention by the issuance in the parent application of a first action Notice of Allowance early in December, 2003. These problems are three-fold, namely, 1) the amendment of the specification to incorporate the subject-matter of certain original claims referred to in the original specification only by number to thereby ensure the existence in the specification of a disclosure of that subject-matter, 2) the replacement of two of the allowed claims with two new claims directed to subject-matter that was omitted from the claims of the preliminary amendment and is considered by the applicant to have some importance not appreciated by the undersigned attorney at the time of the drafting of the preliminary amendment, and 3) the correction of a few errors in the original text of the specification and several claims.

The Examiner has advised applicant's attorney that on looking at the Rule 312 amendment, a problem was encountered that, in the Examiner's opinion, will prevent the same from being entered. Specifically, the manner employed by applicant's attorney for achieving the first of the above objectives was to incorporate into the specification after a reference there to an original claim by number alone, a verbatim quotation of the now canceled corresponding **original** claim from the parent PCT application. This was done for two reasons: First, to avoid any question of "new

matter" (since the wording of each quoted claim would be exactly the same as the corresponding original claim) and, second, to facilitate instant matching of the specification additions to their respective original claims (since the numbers of the additions would be the same as the original claims being quoted).

In the Examiner's view, the introduction of "claims" into the specification is prohibited by the rules. Applicant's attorney does not agree with this interpretation as applied to the present circumstances and believes the Examiner is confusing "form" with "substance". It is clear that "claims" having operative legal substance as legal definitions of an invention on which enforcement is based cannot properly be placed within a patent specification. However, here the original claims, having been canceled, cannot possibly have legal substance or effect and applicant's attorney can see no reason why a descriptive paragraph identified as an "original" (but no longer legally effective) "claim" cannot properly be included as disclosure in a patent specification. If, for example, in a background disclosure of a prior art patent, a main claim of that patent were to be quoted as "claim 1" to serve as a summary of the patent teaching, there could be no grounds for objection that applicant's attorney can perceive. No difference in principle can be seen between that situation and the facts here. The original claims here while removed of legal or substantive effect as operative patent claims by their cancellation, retain status a disclosure and their incorporation as disclosure into the specification ought to be permissible, especially when the context makes clear the absence of their legal effect, as was done here.

Unfortunately, the time remaining for payment of the issue fee in the patent case makes further consideration of this issue impossible, as a practical matter, and applicant is forced to the alternative of filing a continuation. The Examiner did indicate that the subject-matter of the original claims in question when freed of references to "claims" could properly be introduced into the specification and that approach has been adopted in the relevant specification amendments above. The Examiner will find that the elimination from these amendments of the "taint" of references to claim numbers will complicate their comparison with their corresponding claims but resort can be had to the Rule 312 amendment which although non-entered is still of record in the case. Applicant's attorney has made every effort to preserve the original text of the claims in question exclusive of insignificant introductory language. In a few instances, where the relationship was clear, several of the claim statements have been consolidated for simplification. For instance, in the insertion to p. 14, lines 24 & 25, paragraph "b" is a consolidation of the substance of original claims 47, 48, 50, 51, 52 and 54.

Given the non-entry of the requested Rule 312 amendment, the explanatory comments appearing in that paper will be repeated here so this amendment will be complete on its face without reference to the aborted Rule 312 amendment.

Preliminarily, applicant's attorney in drafting the amendatory instructions for making the above changes has endeavored to follow as closely as possible the instructions set forth in 35 USC 1.121, as they are understood. Accordingly, specification changes have

been identified by reproducing entire paragraphs in which they appear, the paragraphs being specified by page and line locations. As to the claims, an amended (marked-up) version of only those claims in which changes are instructed is being presented, pursuant to 35 USC 1.21 (c)(2), as presently understood. In addition, a clean version of the texts of the complete claim schedule, including the amended and new claims (so identified) in their final amended form incorporating the amendatory changes, is provided, pursuant to 35 USC 1.121(c)(3), as presently understood. In the latter, the re-numbering of the claims in the Examiner's amendment in preparation for issue results in a complication in complying with the requirement of 35 USC 1.121(c)(1) of a listing of all claims, past and present, in numerical order. Since with the filing of the continuation, the parent application will not issue, the Examiner's re-numbering has been disregarded in the listings of the claims, both the "clean" and "amended" versions, to avoid the confusing overlap that would otherwise result. Thus, all of the claims, whether canceled or pending, are being identified by their original numbers, with an explanatory note to that effect appearing at the beginning of each listing.

Regarding the reason for the proposed amendments to the specification relating to the original claims, as referred to above, in drafting the original specification himself, the applicant as a time-saving measure adopted the expedient of referring to certain original claims as an indirect disclosure of various features of the invention rather than describing those features directly in the body of the specification in the usual

manner. In other words, applicant used references to claims by number, which had already been formulated, as a "short-cut" measure for disclosing in the specification the subject-matter of the claims in question. While this approach to the preparation of a specification is unorthodox, there appears to be no reason in principle why it was unacceptable.

However, with the replacement of the original claims in their entirety in the Preliminary Amendment and the deletion from the specification by the Examiner in the Examiner's Amendment of the references to any of the original claims, a potential critical problem has arisen due to the consequential absence from the specification as allowed (and as would be issued in the ultimate patent) of support for any limitations directed to the features of the claims so referred to. To take a hypothetical example, if in some subsequent proceeding, say a re-examination proceeding, a broad claim were to be found to be unpatentable, it could be impossible to turn to the specification for narrowing limitations that would pass the test of patentability and thereby salvage some degree of protection for the applicant.

In order to resolve this problem, the specification is being amended above, in the manner suggested by the Examiner, to incorporate the essence of the exact original texts of the various claims originally referred to merely by number. In this way, the intent and, indeed, the substance of the original specification will be preserved to be available for support for particular features if the need should ever arise.

It is acknowledged that this line of amendment is unusual but it is believed to be permissible under the applicable practice and applicant's attorney can see no other alternative solution to this problem. Given that the claims in question were identified by specific numbers in the original specification and the original texts of such claims are being incorporated in essence into the specification at the relevant points, applicant's attorney cannot see how any question of new matter could conceivably be created. All that is being done is to make explicit what was previously implicit.

In order to provide continuity for the claim texts and avoid confusion in amendatory instructions, the phrases in the original references in the specification to the claims which were deleted by the Examiner in the Examiner's amendment are being reinstated with the claim numbers deleted and with minor changes where needed for syntax.

As to the new claims 176 and 177, they are intended to cover with different wording generally the same features as original claims 59 and 62. The latter features are considered somewhat important by applicant, a fact not known by applicant's attorney when the Preliminary Amendment was being prepared. In addition, they relate to material "B" and thus provide somewhat of a "balance" to a number of preceding claims which are all concerned with material "A". In pattern or format, the new claims follow claim 156 in that they deal with a modification of one of the starting materials ("A" or "B") to adapt it for the extrusion followed at the end of the extrusion by restoration of the material

to its original condition as desirable for the extruded product. Given that no objection was raised against claim 156, it would appear that the new claims would be equally free of objection. To maintain constant the total number of pending claims, two less significant claims 139 and 153 (re-numbered as 34 and 48) are being canceled.

Turning now to the corrections (as contrasted from the claim-related additions discussed above), they will be explained in turn. As to page 1, line 9+, a patent number is given an obvious correction and the sentence structure of sub-paragraph "a" is changed to be consistent with that of sub-paragraph "b".

On page 5, line 11+, obviously missing words are being added.

On page 7, line 2, there are no "figs. 4a and b" while --figs. 6 and b-- fit the contextual references to materials "A1" and "B1" while "fig. 4" does not. Later on on page 7, line 9, "B1" is being changed to --B1'-- to agree with the early mention of "B2'". At line 14, the parenthesis is being closed. And at line 15+ on that page, the deletion by the Examiner of a sentence referring to "claims" is confirmed and the introduction of the following paragraph adjusted for that deletion and a word-spelling is corrected.

On page 8, line 24, there is no material "D" in the description and --B-- is obviously needed to agree with "B'" and the significance of "z" is clarified. And in the last line (32) of page 8, --is-- is needed as a verb to replace "as".

Similarly on page 10, line 4, --is-- is needed as a verb to replace "it" and later on at line 10 of this page, --or-- needs to

be inserted to complete the alternative. At line 14, a comma is added for clarity and consistency with the preceding sentence structure. Then, at line 16, a patent number error is corrected to agree with the correct number (see at line 30 of the same page 10).

On page 9, line 4+, near the end of this paragraph, a typographical error is corrected.

On page 12, line 3, "B1" obviously should read --B1'-- to agree with the preceding reference to "B'" and in the following line, "fig. 4a" should read --fig. 6a-- since there is no "fig. 4a" and --fig. 6a-- fits the context. At line 18, a comma is added for clarity. On page 12, line 24, the "knives" referred to do not appear in "fig. 6a" but in --fig. 7a-- and this is being corrected.

On page 13, at the end of line 18, "is" should obviously be --in--. On the same page, line 25, --preferred-- is being inserted before "embodiment" to clarify its relationship to the reference in the preceding paragraph to "preferred embodimnet". In line 27, "fig. 7a" does not show the "segmental streams" referred to in original claim 75 but --figs. 6a and b--.

The complete sentence bridging pages 13 and 14 and the following two sentences contain erroneous material designations, according to the applicant, but since there is no clear internal basis for a correction, these complete sentences are being deleted. They relate to a functional result which is not material to the description. With the deletion, the word "also" in the following sentence becomes redundant and is being dropped.

On page 14, line 23, the reference to "more fragile" makes no sense and is being removed.

On page 16, line 18+, a reference to "B" is being added to complete the comparison and the effect of the "gas" is clarified. Later at line 22, "more fragile" again makes no sense and is deleted and the sentence structure is being simplified.

On page 21, line 20, the basic "terms" are being related to the drawings rather than the "claims" to avoid any confusion.

On page 22, line 4, because there are no "figs. 2a and b" (only fig. 2) and it was --figs. 1 a and b-- that were identified earlier at page 21, line 13, the latter fig. numbers are being substituted.

On page 25, line 3, the "conjugent" arrangement is being corrected to agree with the other conjugent specified at line 5 as well as with the components identified on line 2 preceding.

On page 28, line 17, in "fig. 7b", numeral -22- refers to the "belt" (23 designating a flap) and in line 19, the obviously incorrect "flab" is being changed to --flap--.

On page 33, line 19, it is fig. 8d that shows the "valve arrangement", not "fig. 9" which shows the knives and this is being substituted.

On page 43, line 23, the correct temperature for the yield point of material B2' is 3° C, not "30° C" as stated and this is being changed. 30° C is clearly inconsistent with the other yield point temperatures of this example, i. e. -15° C and -1.5° C for materials A' and B1' and if the yield point was as stated for material B2' at 30° C, it would presumably be frozen solid at the stated extrusion temperature of +1° C. In any event, the reference

is to a physical property which should be correctly described as a matter of fact.

As to the claim corrections, in claims 106, 110, 125 and 129, all of the parenthetical abbreviations for the yield points are being deleted; one such reference is in error (in claim 106, line three from the end, component A is being identified, not B) and all are superfluous and could cause confusion.

In claim 108, last line, an obvious typographical error is corrected.

In claims 131 and 132, commas are being removed after the introductory phrase for consistency with the other claims.

In claim 148, last line, a previous deletion (in brackets) is being extracted.

In claim 149, third line from end, the alphabetical designation --B-- for the material is added for clarification and easier association with other claims.

Applicant's attorney apologizes for the length of this amendment, which is necessitated to a considerable extent by the requirements of 35 CFR 1.121, and, in particular, for any extra burden it may impose upon the Examiner. In view of the prior allowance of the parent application, it is believed that this application is in condition for favorable action and early consideration to this end is respectfully requested.

Respectfully submitted,



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AMENDMENTS TO THE CLAIMS - CLEAN VERSION

(Note: To avoid confusion, claim numbering follows the original sequence, disregarding the re-numbering made by the Examiner in the Examiner's Amendment in preparation for issue now aborted for this continuation.)

Claims 1 - 105 (Canceled).

--106. (Currently Amended) A three-dimensional food product, elongated in at least the z-dimension and consisting of at least two components A and B which have been coextruded to become interspersed with each other, in which a plurality of cells of component A are surrounded at least in the xz plane by at least one component B which forms cell walls surrounding the A component, wherein said B component is a solid (including a viscoelastic solid) at 20° C, the cells of component A are arranged in at least two mutually distinct rows extending generally in the z direction, each said row of cells being separated from each adjacent row by a generally continuous in the z direction boundary cell wall of said B component, and either a) component A is a fluid having no compressional yield point at 20° C or is a solid having plastic, pseudoplastic or viscoelastic consistency at 20° C and a compressional yield point at 20° C which is less than 0.5 x the compressional yield point of B at 20° C, or b) component A is an expanded material containing at least 50% by volume gas.--

--107. (Previously presented) A product according to claim 106 having two generally opposite xz faces and in which each cell of component A extends in a generally y direction substantially

from a position at least adjacent to one xz face of the food product to a position at least adjacent to the other xz face.

--108. (Currently Amended) A product according to claim 106 in which there are two different B components B_1 and B_2 and the boundary cell wall is formed of said first component B_1 and the product has bridging cell walls branching from said boundary cell walls and extending at least part way in a generally x direction towards the adjacent boundary cell wall, the bridging cell walls being formed at least in part of component B_2 .--

--109. (Previously presented) A product according to claim 106 in which the components B_1 and B_2 have different yield points at 20° C.--

--110. (Currently Amended) A product according to claim 109 in which the yield point of component B_1 at 20° C is in the range of 0.1 to 0.5 of the yield point of B_2 at 20° C.--

--111. (Previously presented). A product according to claim 106 which has two generally opposite xz faces and each of the cells of component A extends part way between said two xz faces with at least two of said cells spanning the distance between the two xz faces, all of the cells being separated from one another in the y-direction, and B components are arranged between adjacent cells of component A and are separated from one another generally in the y direction to form cell walls around each component A cell, so that the A component cells are substantially enveloped by cell walls of component B.

--112. (Previously presented) A product according to claim 111 having two different B components B_1 and B_2 in which the B

component between adjacent cells of the A component separated in the y-direction comprises component B₁.

--113. (Previously presented) A product according to claim 106 in which there are bridging cell walls branching from said boundary cell walls separating adjacent rows of A component cells and extending at least part way in a generally x direction toward an adjacent boundary cell wall and between cells of A component in said rows, and said boundary cell walls and said bridging cell walls are formed of the same B component.

--114. (Previously presented) A product according to claim 106, characterized in that any attenuation in the thickness of said bridging cell walls in the vicinity of a boundary cell wall has a local thickness generally not any thinner than 1/15 of the thickest portion thereof.

--115. (Previously presented) A product according to claim 113 in which said boundary walls of B-component extend in waved or zig-zagging manner about a plane extending in the zy plane.

--116. (Previously presented) A product according to claim 106 which has bridging cell walls formed of a component B branching from said boundary cell walls and extending at least part way in a generally x direction toward an adjacent boundary cell wall and the bridging cell walls which branch off from the boundary cell walls, considered in a yz plane, branch off substantially perpendicularly to the boundary cell wall at the branching points thereof.

--117. (Previously presented) A product according to claim 107 which further comprises surface boundary walls of a component

B extending substantially continuously generally at least adjacent to each xz face thereof.

--118. (Previously presented) A product according to claim 106 in which each boundary cell wall separating adjacent rows of cells of said component A is substantially planar.

--119. (Previously presented) A product according to claim 106 in which the cross section of said cells of component A in the xz plane has an average dimension in the z-direction in the range of 0.5 to 10 mm.

--120. (Currently amended) A product according to claim 106 in which the average cross-sectional area of said cells of component A in the xz plane is in the range of 0.5 - 100 mm².

--121. (Previously presented) A product according to claim 106 in which the average separation between adjacent rows of said cells of said component A is in the range 1 - 25 mm.

--122. (Previously presented) A product according to claim 121 in which the boundary cell walls of said component B separating adjacent rows of said cells of component A have a minimum thickness in the x direction in the range 5 - 50% of the average separation between adjacent rows.

--123. (Previously presented) A product according to claim 116 in which the bridging cell walls have a minimum thickness of 0.1 mm.

--124. (Previously presented) A product according to claim 106 wherein component A in the final form of the product at 20° C is fluid.

--125. (Currently amended) A product according to claim 106 wherein component A in the final form of the product at 20° C is a plastic, pseudoplastic or viscoelastic material having a compressional yield point lower than 1000 g cm⁻².

--126. (Previously presented) A product according to claim 125 wherein component A comprises a blend of solid particles selected from the group consisting of short fibres, nut- grain- or shell-pieces, film-pieces or flakes, with a water based solution or gel.

--127. (Previously presented) A product according to claim 125 wherein component A comprises a blend of solid particles selected from the group consisting of short fibres, nut-, grain-, or shell-pieces, film-pieces or flakes with an oil.

--128. (Previously presented) A product according to claim 106 wherein component B is in the form of a gel.

--129. (Currently Amended) A product according to claim 106 in which component B including a component B reinforced with solid particles selected from the group consisting of short fibres, or grain-, shell- or film-pieces or flakes, has a yield point of at least 200 g cm².

--130. (Previously presented) A product according to claim 106 wherein component B is comprised of fat, oil or wax with flavoring additives.

--131. (Previously presented) A product according to claim 106 wherein component B comprises protein .

--132. (Previously presented) A product according to claim 106 wherein component B is a microporous agglomerate of particles containing water in the pores, said particles being selected from the group consisting of short fibres or grain-, shell- or film-pieces or flakes and are bonded together by micro-stands of a polymer selected from the group consisting of coagulated gluten or a natural or synthetic rubber as produced by coagulation of a latex.

--133. (Previously presented) A product according claim 106 wherein component B comprises a gel of a polymer selected from the group consisting of carbohydrates or carbohydrate related compounds.

--134. (Previously presented) A product according to claim 106 wherein component B comprises a polymer and in the boundary cell walls of said polymer B extending in a generally z direction the molecules thereof are molecularly oriented generally in the z direction.

--135. (Previously presented) A product according to claim 106 wherein component A is a juice containing dissolved sugar and is in form of a flowable soft gel or thick liquid thickened with a thickening agent.

--136. (Previously presented) A product according to claim 106 wherein component A is a juice in the form of a soft gel or a thick liquid thickened with a thickening agent and contains hydrolysed proteins to in sufficient amount to impart taste and nutritional value.

--137. (Previously presented) A product according to claim 106 wherein component A contains a pulp of subdivided protein fibres or film.

--138. (Previously presented) A product according to claim 106 wherein component A is a cultured milk product.

--139. (Currently Canceled)

--140. (Previously presented) A product according to claim 106 wherein component A comprises a meat paste.

--141. (Previously presented) A product according to claim 106 wherein the A component contains gas dispersed therethrough.

--142. (Previously presented) A product according to claim 141 which is a bread or cake and component A comprises expanded and baked starch and B comprises protein.

--143. (Previously presented) A product according to claim 141 wherein component B comprises cheese.

--144. (Previously presented) A product according to claim 106 wherein component A has two different components, A1 and A2.

--145. (Previously presented) A product according to claim 144 in which component A1 comprises a waterbased solution or gel forming a matrix for solid particles, and A2 comprises fat or oil forming a matrix for solid particles.

--146. (Previously presented) A food product which is a three dimensional solid at 20° C and is elongated in at least the z-dimension and consists of at least two components A and B which have different visual appearances and have been coextruded to intersperse segments of A and segments of B, wherein each B component is a solid at 20° C and each A component is a solid at 20°

C, the segments of component A are arranged in at least two mutually distinct rows extending generally in the z-direction, and the rows of segments of component A and interspersed segments of component B are visible at at least one surface of the product extending generally in a xz plane.

--147. (Previously presented) A product according to claim 146 in which the segments of component A and segments of component B are attenuated in their minimum thickness adjacent their ends as compared to their thickness at points intermediate their ends and in which the segments are dragged out during their coextrusion so as to form an acute angle of less than about 45° with the z-direction in the xz plane.

--148. (Currently amended) A product according to claim 146 in which component A and component B are selected from the group consisting of the following combinations:

- a. dark chocolate/ light chocolate
- b. chocolate/marzipan
- c. chocolate/caramel
- d. two differently coloured edible gums or fruit gels.

--149. (Currently Amended) A method of manufacturing by coextrusion of a plurality of extrudable edible components in an extrusion die a solid food product in which the components are extruded in a z-direction from the extrusion die and exit therefrom, and in which at least one extrudable component A' is formed into a flow through a channel and an extrudable component B' is formed in a flow through a channel, the flow of B' being in generally an x direction transverse to said z direction adjacent

the flow of A', in which after exiting from said die, the flows of A' and B' are regularly divided generally in said x- direction by a dividing member to form at least two rows of flows of A' and B' separated in the x-direction, in each of which rows the flows of A' and B' are segmented in the z direction with a segment of flow of B' being joined upstream and downstream to each segment of flow of A', whereby B' segments are interposed between adjacent A' segments in the z direction and in which adjacent rows are joined to one another along their yz faces, and wherein after the joining of the segmental flows B' is transformed to a normally solid material B having a compressional yield point which is at least twice that of B'.

--150. (Previously presented) A method according to claim 149 in which after the segments of flows are joined, the material A' is expanded to at least twice its original volume, or material A' is treated to reduce its yield point, if material A' is solid, or its apparent viscosity, if material A' is liquid, by at least one-half.

--151. (Previously presented) A method according to claim 149, wherein the extrusion is carried out at an elevated temperature and material B' is treated by cooling.

--152. (Previously presented) A method according to claim 149 wherein material B' is treated for form a coagulate or gel.

--153. (Currently canceled).

--154. Previously presented) A method according to claim 152 wherein material B' normally has a continuous, firm gel structure and prior to its coextrusion is converted into extrudable form by disruption to a finely divided condition, and after the end of the

coextrusion, material B' is treated to reestablish its continuous firm structure.

--155. (Previously presented) A method according to claim 152 wherein material B' is treated by chemical reaction to form the coagulate or gel.

--156. (Previously presented) A method according to claim 155 wherein a gelling reagent or coagulant is incorporated into material B' prior to the extrusion process and the rate of gelation or coagulation is retarded to delay gelation or coagulation until after the completion of said joining of said flows.

--157. (Previously presented) A method according to claim 156 in which said reagent or coagulant is incorporated into solid particles suspended in material B'.

--158. (Previously presented) A method according to claim 156 in which material B' is adapted to undergo gel formation or coagulation by enzymatic action and the gel formation or coagulation is carried out by means of an enzyme.

--159. (Previously presented) A method according to claim 152 wherein material B' is adapted to undergo gel formation or coagulation by action of a reactant and said reactant is incorporated in the material A', thereby gradually migrating into material B' when materials A' and B' are brought together in the coextrusion die.

--160. (Previously presented) A method according to claim 149 in which both material A' and material B' are each formed into at least two flows separated from one another in the x direction and

in which flows of material B' are partially interposed between adjacent flows of material A'.

--161. (Previously presented) A method of coextruding at least two extrudable materials A' and B' in an extrusion die which comprises the steps of supplying at least one material A' from a reservoir therefor and advancing the same by extrusion pressure as a flow through one extrusion channel and out of an exit from the channel end, and supplying at least one material B' from a reservoir therefor and advancing the same by extrusion pressure as a narrow flow through a separate extrusion channel and out of an exit from the channel end; dividing each of the flows of materials A' and B' not prior to the respective channel exits into segments of the respective extrudates by a dividing member therefor, each said dividing member moving relative to the corresponding channel exit to traverse the entire channel exit; and controlling the flows of both materials A' and B' out of the extrusion channel exit to cause said flows to be intermittent in nature in synchronism with the movement of said dividing members.

--162. (Previously presented) The method of claim 161 wherein said flows of said materials A' and B' are controlled to cause the respective materials to flow from the corresponding channel exits when said dividing members are in said first and second positions but not when said dividing members are moving across said channel exits.

--163. (Previously presented) The method of claim 161 in which said flows of said materials A' and B' are controlled to take place intermittently by periodically applying and releasing said

extrusion pressure to the respective materials in the corresponding channels.

--164. (Previously presented) The method of claim 161 in which said flows of said materials A' and B' are controlled to take place intermittently by periodically blocking and opening the channel exits to prevent said materials from exiting therefrom.

--165. (Previously presented) A method according to claim 161 including the additional step of joining together the segments of said materials A' and B' after their formation by said dividing member so that segments of material A' alternate with segments of material B'.

--166. (Previously presented) A method according to claim 162 in which the relative movement of said dividing members with respect to said channel exits creates a plurality of adjacent rows of segments of material A' and segments of material B' joined to the segments of material A' in said rows.

--167. (Previously presented) A method according to claim 149 which comprises the further step of collecting the rows of segments of materials A' and B' after they are joined, in a collection chamber in the form of a sheet.

--168. (Previously presented) A method of manufacturing by coextrusion in sheet, ribbon or filament form of a food product which is normally solid at 20° C and is comprised of at least two components A and B in segment form, wherein segments of component B are in contact with segments of component A, which comprises extruding flows of an extrudable component A pre-cursor A' and of an extrudable component B pre-cursor B' from separate orifices of

an extrusion die, sub-dividing each of said flows into segments and combining said sub-divided flows in rows with the segments of pre-cursor B' generally alternating with segments of pre-cursor A' and, after extrusion, converting said pre-cursor B' to a solid material B, in which extrudable pre-cursor B' is adapted to be rendered normally solid by coagulation or gel formation and a coagulant or gelling reagent is incorporated in pre-cursor A' whereby when said segments of pre-cursor B' are in contact with segments of pre-cursor A', said pre-cursor B' is gelled or coagulated by said reagent.

--169. (Previously presented) A method according to claim 168 in which said pre-cursor B' is adapted to undergo gelling or coagulation by the action of an enzyme and an enzyme is incorporated in said pre-cursor A'.

--170. (Previously presented) A method according to claim 169 in which pre-cursor B' comprises a protein and said enzyme is a protease.

--171. (Previously presented) An apparatus suitable for carrying out a process according to claim 149, comprising an extrusion die having channels for flow therethrough of at least two different relatively soft extrudable materials, said channels ending in orifices for exit in generally one direction of said materials from the channels, said channels being separated from one another in a direction generally transverse to said one direction, dividing members capable of moving in said generally transverse direction across the orifices to divide the flows into segments arranged in at least two adjacent rows extending generally in said

one direction, and means for combining said rows of segments into a unitary product, and comprising further means for subjecting said product to conditions to convert at least one of the materials in the product from its relatively soft extrudable state to a relatively hard solid state.

--172. (Previously presented) Apparatus suitable for carrying out the process of claim 161, comprising an extrusion die having channels terminating in exit orifices through which at least two different extrudable materials may flow, said orifices being arranged generally in a row and separated from one another generally in the direction of said row, means for causing the materials to pass through the channels and out of said orifices, dividing members which are capable of intermittent movement relative to said orifices in generally said same direction across the orifices to divide the flows of materials therethrough, and means for controlling the movement of the dividing members and said means for causing the materials to pass through the channels and out of said orifices so that relative movement of the dividing members with respect to said orifices takes place intermittently and said materials are passed out of said orifices while relative movement between the dividing members and the orifices is stopped.

--173. (Previously presented) Apparatus as in claim 172 wherein said means for causing said material to pass through said channels and out of the orifices thereof comprises a pressure member for each channel operable intermittently to exert and release extrusion pressure upon the material in such channel.

--174. (Previously presented) Apparatus as in claim 172 wherein said channels have entrance openings for introduction of the respective materials therein and further comprising reservoirs for the respective materials in communication with said entrance openings to deliver the materials therefrom to said openings and non-return valves between said entrance openings and said reservoirs to prevent return flow of materials to said reservoirs when said pressure members exert extrusion pressure upon the materials in said channels while allowing flow from the reservoirs to said openings when said extrusion pressure is released.

175. (Previously presented) Apparatus as in claim 172 wherein said means for controlling the driving of said materials through said channels and out of the orifices thereof comprises valve means associated with each channel orifice and operable to alternatively block and open said orifices for passage of said materials therethrough.

176. (New) A method according to claim 149 wherein component A' has a consistency that is undesirably soft for ready extrusion but is at a desirable level in the final product and component A' is adapted to undergo at least partial solidification upon cooling, which comprises the further steps of prior to the introduction of said material A' to the flow channel therefor, subjecting material A' to sufficient cooling to partially solidify at least a major portion thereof into the form of suspended particulate solids whereby the consistency of material A' is modified for ready extrusion; and at the end of the extrusion, applying to the extruded product sufficient heat to melt said suspended particulate

solids therein to thereby restore the desirable consistency of component A' in the final product.

177. A method according to claim 149 which comprises the further steps of prior to the introduction of component A' into the flow channel therefor, dispersing through said component A' a polymer that has the effect of enhancing the flow consistency of said component A' during the extrusion and is susceptible to treatment to depolymerize the same; and at the end of the extrusion subjecting the extruded product to treatment to at least partially depolymerize said polymer to thereby remove from the final product the consistency-enhancing effect of said component A'.

AMENDMENTS TO THE CLAIMS - MARKED-UP VERSION

(Note: Claim numbers follow original sequence disregarding the Examiner's renumbering in the Examiner's amendment.)

--106. (Currently Amended) A three-dimensional food product, elongated in at least the z-dimension and consisting of at least two components A and B which have been coextruded to become interspersed with each other, in which a plurality of cells of component A are surrounded at least in the xz plane by at least one component B which forms cell walls surrounding the A component, wherein said B component is a solid (including a viscoelastic solid) at 20° C, the cells of component A are arranged in at least two mutually distinct rows extending generally in the z direction, each said row of cells being separated from each adjacent row by a generally continuous in the z direction boundary cell wall of said B component, and either a) component A is a fluid having no compressional yield point at 20° C or is a solid having plastic, pseudoplastic or viscoelastic consistency at 20° C and a compressional yield point ~~(YPB₂₀)~~ at 20° C which is less than 0.5 x the compressional yield point of B at 20° C ~~(YP_{B20})~~, or b) component A is an expanded material containing at least 50% by volume gas.--

--108. (Currently Amended) A product according to claim 106 in which there are two different B components B₁ and B₂ and the boundary cell wall is formed of said first component B₁ and the product has bridging cells walls branching from said boundary cell wells and extending at least part way in a generally x direction towards the adjacent boundary cell wall, the bridging cell walls being ~~form~~ formed at least in part of component B₂.--

--110. (Currently amended) A product according to claim 109 in which the yield point of component B₁ at 20° C (~~VP_{B1}(20)~~) is in the range of 0.1 to 0.5 of the yield point of B₂ at 20° C (~~VPBP(20)~~).--

--120. (Currently amended) A product according to claim 106 in which the average cross-sectional area of said cells of component A in the xz plane is in the range of ~~0~~50.5 - 100 mm².--

--125. (Currently amended) A product according to claim 106 wherein component A in the final form of the product at 20° C is a plastic, pseudoplastic or viscoelastic material having a compressional yield point τ ~~VP_A~~ lower than 1000 g cm⁻².--

--129. (Currently Amended) A product according to claim 106 in which component B including a component B reinforced with solid particles selected from the group consisting of short fibres, or grain-, shell- or film-pieces or flakes, has a yield point ~~VP_B~~, of at least 200 g cm².--

--131. (Currently amended) A product according to claim 106 wherein component B comprises protein.--

--132. (Currently amended) A product according to claim 106 wherein component B is a microporous agglomerate of particles containing water in the pores, said particles being selected from the group consisting of short fibres or grain-, shell- or film-pieces or flakes and are bonded together by micro-stands of a polymer selected from the group consisting of coagulated gluten or a natural or synthetic rubber as produced by coagulation of a latex.--

--148. (Currently amended) A product according to claim 146 in which component A and component B are selected from the group consisting of ~~{consist of one of}~~ the following combinations:

- a. dark chocolate/ light chocolate
- b. chocolate/marzipan
- c. chocolate/caramel
- d. two differently coloured edible gums or fruit gels.--

--149. (Currently Amended} A method of manufacturing by coextrusion of a plurality of extrudable edible components in an extrusion die a solid food product in which the components are extruded in a z-direction from the extrusion die and exit therefrom, and in which at least one extrudable component A' is formed into a flow through a channel and an extrudable component B' is formed in a flow through a channel, the flow of B' being in generally an x direction transverse to said z direction adjacent the flow of A', in which after exiting from said die, the flows of A' and B' are regularly divided generally in said x-direction by a dividing member to form at least two rows of flows of A' and B' separated in the x-direction, in each of which rows the flows of A' and B' are segmented in the z direction with a segment of flow of B' being joined upstream and downstream to each segment of flow of A', whereby B' segments are interposed between adjacent A' segments in the z direction and in which adjacent rows are joined to one another along their yz faces, and wherein after the joining of the segmental flows B' is transformed to a normally solid material B having a compressional yield point which is at least twice that of B'.--

Cancel claims 139 and 153 and add the following new claims:

--176 (New) A method according to claim 149 wherein component A' has a consistency that is undesirably soft for ready extrusion but is at a desirable level in the final product and component A' is adapted to undergo at least partial solidification upon cooling, which comprises the further steps of prior to the introduction of said material A' to the flow channel therefor, subjecting material A' to sufficient cooling to partially solidify at least a major portion thereof into the form of suspended particulate solids whereby the consistency of material A' is modified for ready extrusion; and at the end of the extrusion, applying to the extruded product sufficient heat to melt said suspended particulate solids therein to thereby restore the desirable consistency of component A' in the final product.--

--177. A method according to claim 149 which comprises the further steps of prior to the introduction of component A' into the flow channel therefor, dispersing through said component A' a polymer that has the effect of enhancing the flow consistency of said component A' during the extrusion and is susceptible to treatment to depolymerize the same; and at the end of the extrusion subjecting the extruded product to treatment to at least partially depolymerize said polymer to thereby remove from the final product the consistency-enhancing effect of said component A'.--